



CITY OF SAINT PAUL  
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## **REQUIREMENTS FOR CONSTRUCTION OF A DETACHED GARAGE**

(Per 2006 International Residential Code [IRC])

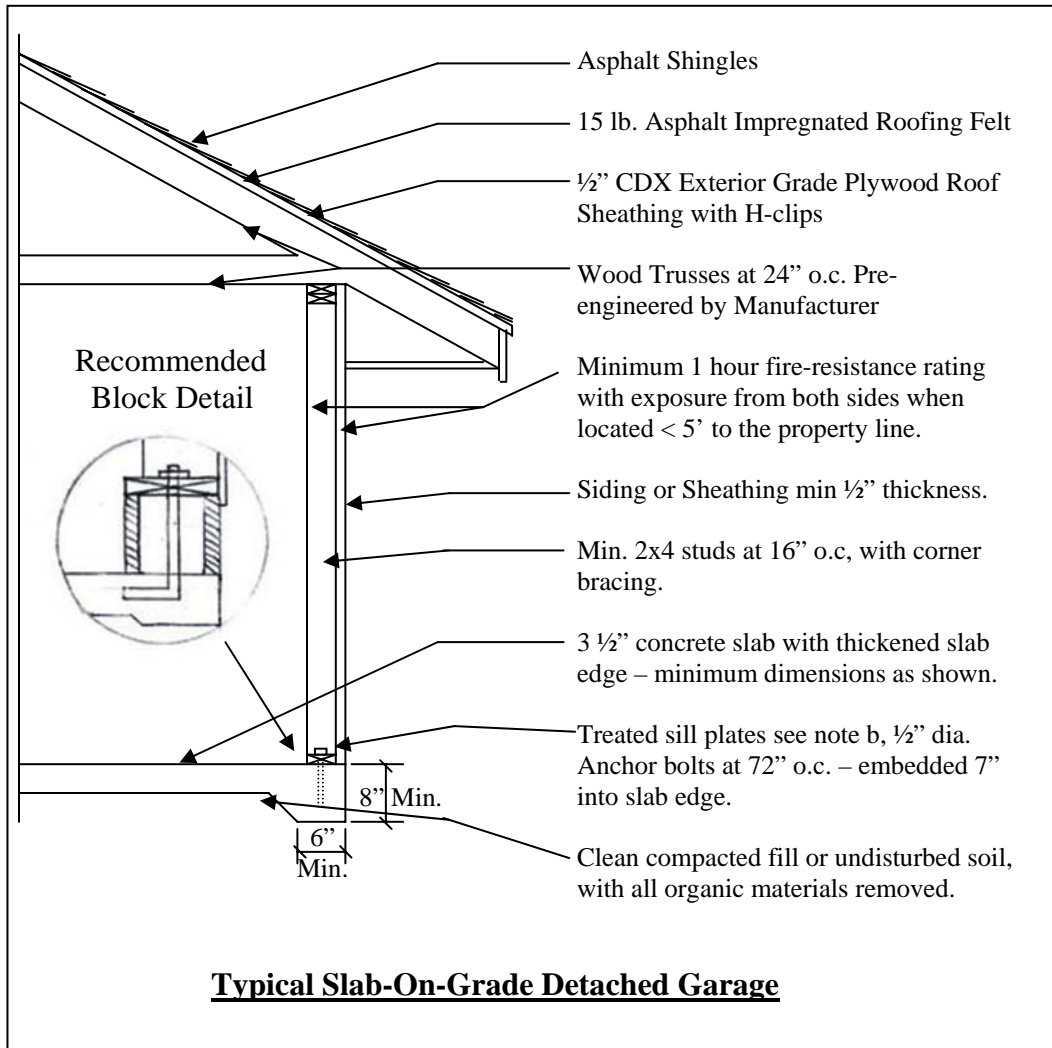
A permitted detached accessory building may be constructed on a floating slab or an approved foundation provided:

1. All organic material is removed from the construction limits.
2. All concrete exposed to freezing or salt must be air-entrained. Code requires 5%-7% air-entrainment. Tell the dispatcher when you order ready-mix.
3. Calcium chloride setting accelerator in concrete may not be used in concentrations greater than 1/10%. Recommended practice is none. Non-chloride accelerators are allowed.
4. Concrete slab shall be a minimum of 3 1/2" thick with the perimeter of the slab 8" thick, and 6" wide poured in a monolithic manner. The garage floor area used for vehicular parking must be sloped to provide drainage toward the vehicle entry doorway or to a drainage system approved by this Office.
5. Concrete slab to be at least 3500 P.S.I. compressive strength with air entrainment per Item 2. If wire mesh is used it should be epoxy coated. Fiber-reinforced concrete is allowed.
6. Anchor bolts shall be a minimum 1/2" diameter, maximum 1' from the corner with a minimum of 2 anchor bolts per plate. The anchor bolts shall be spaced a maximum of 6' on center, embedded 7" into poured concrete or grouted into concrete block. Anchor straps are acceptable when installed according to the manufacturer's specifications.
7. NOTE: Garages with unbalanced fill against the outer wall (i.e.- finished grade higher than the top of the slab) will require a plan showing a cross-section through the wall that indicates how the wall is connected to the footing or slab and how the wall will be reinforced. This is especially important when the wall is not continuous (ex: 1/2 concrete block and 1/2 wood frame) since the lower portion must act as a retaining wall.
8. Bottom plates less than 8" from exposed ground are to be minimum 2" X 4" redwood or decay resistive treated. Top plates (2) must be double-lapped at corners and splices must be staggered a minimum of 24". Maintain 6" minimum clearance between the soil and wood.
9. Walls shall be sheathed with 11/16" nominal thickness boards, or 1/2" fiberboard, 1/2" nominal composite wood panels or other material approved by Code.
10. Roof trusses, when used, shall be engineered and pre-manufactured.
11. Roof sheathing may be 1" nominal thickness lumber, 7/16" CDX plywood, or other approved material. 7/16" plywood or similar with span rating of 24/0, supported on 24" centers, requires H-clips on all horizontal joints centered in each rafter bay.
12. Approved shingles or wood shingles to be applied according to Chapter 9 of the IRC or to the manufacturer's recommendation.
13. Garages which front on an alley are required to have contrasting house numbers posted, visible from the alley, the same as the house has on the street side.
14. Garage walls and eave projections closer than 5 feet to an interior property line must be of 1-hour fire-resistive construction with exposure from both sides. Eaves are not allowed closer than 2 feet to the line.

## **ATTACHED GARAGES**

1. Garages attached to the principal structure (house) shall be constructed per the house's construction requirements and have continuous footings 42" below grade. Complete construction plans are required for attached garages.
2. On an attached garage a fire wall between the house and garage shall not be less than 1/2" gypsum wallboard applied on the garage side. Doors opening into the dwelling shall not be less than tight-fitted 1 3/8" solid core door or 1 3/8" honeycombed steel doors.

**ALL CONSTRUCTION MUST MEET THE REQUIREMENTS OF THE 2006 IRC. (See below)**



**Garage Door Headers:**  
(For 16'-0" Door Opening)

No Roof Load = (2)-2x12's

Hip Roof = (2)-2x14's

Full Roof Load = (3)-  
2x14's (#1 Douglas fir or  
Engineered Beam)

Note: 18'-0" or larger garage  
door openings require special  
design.

**Narrow Wall Design:**

Walls adjacent to garage  
door openings that are less  
than 48" in width require  
consideration to bracing.

Walls adjacent to garage  
door openings that are 24"  
or less in width require  
consideration to bracing and  
hold downs.  
(See narrow wall detail)

**Other Notes to Garage Construction:**

- A) New "curb cuts" in the public way require a permit from Public Works. Public Works: (651) 266-6120.
- B) Wood on concrete or masonry in direct contact with the earth shall be treated or decay resistant, as well as sills or plates less than 8" from exposed ground, and siding, sheathing or wall framing less than 6" from grade.
- C) Garages adjacent to alleys are required to have contrasting house numbers posted, clearly visible from the alley.
- D) Alterations to existing topography shall provide drainage on-site to the public way.
- E) Contractors/owners are responsible for controlling erosion and run-off during construction and until landscaping is stabilized.
- F) Roof eave/overhangs must be at least 2 feet from adjacent private property. Roof run-off shall be controlled within the owner's property.
- G) Roof eave/overhangs closer than 5' to the property lines must have 5/8" type X gypsum sheathing on the under side for fire protection.